

Fig. 53. Distribution of members of the affinis species group.

Gambusia rachowi is found at Jesus Carranza, Veracruz, in the Río Coatzocoalcos system.

Gambusia echeagayari inhabits a small stream near the town of Palenque, Chiapas, which drains into the Río Usumacinta system.

## DISTRIBUTION OF THE SUBGENUS ARTHROPHALLUS

This subgenus is distributed over continental and coastal habitats, from eastern North America to southern Mexico, with a single species in South America. It has no members either in lower Central America or the Antilles; the greatest diversity of taxa occurs in Texas and northern Mexico.

affinis species group (fig. 53): This species group is the most far-ranging of the genus, both as a group, from New Jersey to Colombia, and as individual species, as *G. affinis* and *G. holbrooki* are quite widespread. These two species have been introduced worldwide to control mosquitos. These efforts have had

some limited success; *Gambusia* apparently prefers to eat larval fish when available, and the introduction of these species has often had devastating effects on the native fish fauna, including other species of *Gambusia*. It is difficult to know certainly the natural ranges of these two taxa, but careful compilations and record-keeping allow a reasonable approximation.

Gambusia holbrooki is found in fresh water along the Eastern Seaboard of the United States, from the southern tip of New Jersey through to the Florida Keys, and in western drainages from Georgia into the Gulf of Mexico. It is replaced by G. affinis further west; the exact dividing line or the nature of a zone of intergradation was not studied here. It is broadly sympatric with G. rhizophorae in extremely southern Florida.

Gambusia affinis, in addition to the Gulf drainages of Louisiana, Alabama, Mississippi, and Texas, ranges further north in the United States (to Illinois) and is common throughout the Río Grande and Pecos River